



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,307	12/01/2003	James D. Ralph	5490E-000608/COC	2911
27572 7590 11/26/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER PHILOGENE, PEDRO	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 11/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,307	Applicant(s) RALPH ET AL.	
	Examiner Pedro Philogene	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-22, 24, 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-22,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (5,364,396) in view of Errico et al. (5,531,746) in view of Burgess et al (6,432,108).

With respect to claim 20 Robinson et al disclose a plate assembly comprising a first longitudinal plate (16) having an end defined by longitudinal prongs (44) a second longitudinal plate (18) having a longitudinal bore, as best seen in FIG.3, the longitudinal bore being adapted to receive the prongs for longitudinal translation therein through a plurality of positions; as set forth in column 4, lines 1-61; at least one bone fastener (59) for coupling the plate assembly to vertebral bone using the integral means (58) for coupling the plate assembly, means (32,34,36,38) for adjusting the length of the plate assembly, means (20,42) for locking the length of the plate assembly, wherein the means for locking the length of the plate assembly comprises a threaded bore (40) and a set screw (20) passing between the means for adjusting the length (44) of the plate assembly and into the threaded bore (40).

It is noted that Robinson et al did not teach of a bore or means for inserting at least one bone fastener into the vertebral bone polyaxially at any of a plurality of selectable angles of relative to the plate assembly; as claimed by applicant. However, in

similar art, Errico et al evidences the use of a bore with a coupling element to provide a secure prevention against screw back-out, as well as locking the screw at the preferred non-perpendicular angulation with respect to the plate.

Therefore, given the teaching of Errico et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Robinson et al, as taught by Errico et al to provide a secure prevention against screw back-out, as well as locking the screw at the preferred non-perpendicular angulation with respect to the plate.

It is noted that the above combination of references did not teach of a threaded bore substantially perpendicular to the plate assembly; as claimed by applicant. However, in a similar art, Burgess et al evidence the use of a device with a threaded bore substantially perpendicular to the plate assembly for receiving a screw to adjust the longitudinal distance relative to the plate assembly.

Therefore, given the teaching of Burgess et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Robinson/Errico et al, as taught by Burgess et al, to adjust the longitudinal distance relative to the plate assembly.

With respect to claims 21,22,24, the above combination of references teaches all the limitations, as set forth in column 3, lines 10-68; column 4, lines 1-68, column 5, lines 1-21, of Robinson et al.; and column 4, lines 40-45 of Errico et al; and column 5, lines 19-40 of Burgess et al.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (5,364,396) in view of Errico et al. (5,531,746) in view of Burgess et al (6,432,108) in view of Luhr et al (5,129,903).

With respect to claim 25 Robinson et al disclose a plate assembly comprising a first longitudinal plate (16) having an end defined by longitudinal prongs (44) a second longitudinal plate (18) having a longitudinal bore, as best seen in FIG.3, the longitudinal bore being adapted to receive the prongs for longitudinal translation therein through a plurality of positions; as set forth in column 4, lines 1-61; at least one bone fastener (59) for coupling the plate assembly to vertebral bone using the integral means (58) for coupling the plate assembly, means (32,34,36,38) for adjusting the length of the plate assembly, means (20,42) for locking the length of the plate assembly, wherein the means for locking the length of the plate assembly comprises a threaded bore (40) and a set screw (20) passing between the means for adjusting the length (44) of the plate assembly and into the threaded bore (40).

It is noted that Robinson et al did not teach of a bore or means for inserting at least one bone fastener into the vertebral bone polyaxially at any of a plurality of selectable angles of relative to the plate assembly; as claimed by applicant. However, in similar art, Errico et al evidences the use of a bore with a coupling element to provide a secure prevention against screw back-out, as well as locking the screw at the preferred non-perpendicular angulation with respect to the plate.

Therefore, given the teaching of Errico et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of

Art Unit: 3733

Robinson et al, as taught by Errico et al to provide a secure prevention against screw back-out, as well as locking the screw at the preferred non-perpendicular angulation with respect to the plate.

It is noted that the above combination of references did not teach of a threaded bore substantially perpendicular to the plate assembly; as claimed by applicant. However, in a similar art, Burgess et al evidence the use of a device with a threaded bore substantially perpendicular to the plate assembly for receiving a screw to adjust the longitudinal distance relative to the plate assembly.

Therefore, given the teaching of Burgess et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Robinson/Errico et al, as taught by Burgess et al, to adjust the longitudinal distance relative to the plate assembly.

It is further noted that the above combination of references did not teach that the two prongs move away transversely from one another and press against an inner surface of the longitudinal bore of the second longitudinal plate; as claimed by applicant, However, in similar art, Luhr et al, column 4, lines 13-17, evidence the use of a plate having two prongs that move away transversely from one another and press against an inner surface of the longitudinal bore of the second longitudinal plate for a securing of the plate portions in each position adjusted.

Therefore, given the teaching of Luhr et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of

Robinson/ Errico/Burgess et al, as taught by Luhr et al for a securing of the plate portions in each position adjusted.

Response to Amendment

Applicant's arguments filed 9/5/07 have been fully considered but they are not persuasive. Applicant's argument that Robinson and Errico, either individually, or in combination, fail to disclose means for locking the length of the plate assembly including a threaded bore substantially perpendicular to the plate assembly and a set screw passing between the means for adjusting the length of the plate assembly and into the threaded bore, is acknowledged. However, the reference to Burgess et al evidences the use of a plate assembly having a threaded bore and a screw perpendicular to the plate assembly to adjust the length of the plate assembly. Therefore, given the teaching of Burgess it would be obvious to one of ordinary skill in the art to modify the device of Robinsin/Errico, by incorporating a threaded bore and a screw perpendicular to the plate assembly to adjust the length of the plate assembly. As to the argument that the references to Robinson and Errico did not teach the two prongs move away transversely from one another and press against an inner surface of the longitudinal bore of the second plate. The reference to Luhr et al evidences the use of a fixing means, e.g. a set screw cooperating with the legs or prongs for a securing of the plate portions in each position adjusted. Therefore, Luhr et al teach of using a set screw for moving the legs or prongs. Given the problem to be solved, under the correct analysis, any need or problem known in the field and addressed by the patents can provide a reason for combining the elements in the manner claimed. It is common sense that

Art Unit: 3733

familiar items may have obvious uses beyond their primary purposes, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like a piece of a puzzle. In addition, where there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp.. Finally, in *Sakraida v. AG Pro, Inc.*, 425 U.S. 237 (1976) the court derived from the precedents the conclusion that when a patent "simply arranges old elements with each performing the same function it had been known to perform" and yields no more than one would expect from such arrangement, the combination is obvious.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3733

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (571) 272-4716. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272 - 4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pedro Philogene
November 14, 2007


PEDRO PHILOGENE
PRIMARY EXAMINER